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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,284	07/27/2006	Dieter Funk	021500-142	1559

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EXAMINER
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SZEWCZYK, CYNTHIA

ART UNIT	PAPER NUMBER
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1791

NOTIFICATION DATE	DELIVERY MODE
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12/15/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/551,284	<b>Applicant(s)</b> FUNK ET AL.	
	<b>Examiner</b> CYNTHIA SZEWCZYK	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005 and 17 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 8-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/27/05 and 7/27/06</u> .                                     | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of claims 1-7 in the reply filed on November 17, 2008 is acknowledged. The traversal is on the ground(s) that applicant believes that claims can be examined without serious burden on the examiner. This is not found persuasive because the two groups lack a corresponding special technical feature and as such lack unity of invention – no errors in the unity of invention have been pointed out.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 8-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 17, 2008.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 10. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing

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sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by YOSHIZAWA et al. (EP 0393759).

YOSHIZAWA teaches a method of heating glass sheets for laminated glass. YOSHIZAWA teaches that the glass sheets may be asymmetrical (p. 2, lines 13-17). YOSHIZAWA teaches that the glass sheets are preheated and press-bent (p. 2, lines 19) and finally cooled in a lehr (p. 3, line 46).

YOSHIZAWA discloses that the temperature of the glass sheets is equal after the preheating (p. 2, lines 30-33).

YOSHIZAWA discloses that the temperature of the glass sheets at the end of the preheating is used as the control parameter (p. 4, lines 10-15).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over YOSHIZAWA et al. (EP 0393759) in view of INOUE et al. (US 2004/0079112 A1).

YOSHIZAWA teaches a method of heating glass sheets for laminated glass. YOSHIZAWA discloses that the temperature of the glass sheets at the end of the preheating is used as the control parameter (p. 4, lines 10-15). YOSHIZAWA is silent as to detecting the temperature after pressing.

INOUE teaches a method of bending a glass sheet. INOUE discloses that an objective of the invention is to provide a glass sheet for automobile windows (para. 0002) without a wrinkle or optical distortion (para. 0008). INOUE discloses that this is accomplished by controlling the bending temperature and bending

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time period (para. 0009). YOSHIZAWA discloses that the glass is intended to be used as automobile windows as well (p. 2, lines 3-5) and would therefore be designed to produce glass without a wrinkle or optical distortion as well.

Therefore, it would have been obvious that the bending temperature and bending time period would have been controlled in YOSHIZAWA as well. It would have been obvious to one of ordinary skill in the art that controlling bending temperature and bending time period would require measuring the temperature of the glass throughout the bending process, which would include the starting and final bending temperatures.

Regarding claim 4, figure 1a of INOUE shows the relation between glass bending time at different viscosities. Figure 1a shows that a higher viscosity requires a longer bending time, therefore, a glass at a higher temperature would require a longer bending time.

9. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over YOSHIZAWA et al. (EP 0393759) in view of HERRINGTON et al. (US 4,952,227).

YOSHIZAWA teaches a method of heating glass sheets for laminated glass. YOSHIZAWA is silent as to the use of an intermediate cooling air.

HERRINGTON teaches a method of bending glass sheets wherein the apparatus is controlled to adjust operating parameters based on properties of the glass sheet running through similar to the process of YOSHIZAWA.

HERRINGTON teaches that it is necessary to provide cooling air to the

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preheating area to prevent the glass from over heating (col. 7, lines 3-18). It would have been obvious to one of ordinary skill to provide cooling air to the preheater of YOSHIZAWA because YOSHIZAWA discloses that it is necessary to control the temperature of the glass so that it does not overheat to the extent that deformation control would be lost (col. 5, lines 46-51).

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over YOSHIZAWA et al. (EP 0393759) in view of HERRINGTON et al. (US 4,952,227) as applied to claims 5 and 6 above, and further in view of BAMFORD et al. (US 4,043,782).

YOSHIZAWA as modified by HERRINGTON teaches a method of heating glass sheets for laminated glass wherein air cooling is used as an intermediate cooling to avoid overheating of the glass. Modified YOSHIZAWA is silent as to the blowing pressure of the air.

BAMFORD teaches a method of bending thin glass sheets for automobile windows. BAMFORD discloses that the glass undergoes tempering with air blowing under low pressure (col. 7, lines 35-40). BAMFORD discloses that the glass undergoes a first tempering at high air pressure and a second tempering at a lower air pressure of about 1 to 3 psi (col. 9, lines 1-4) or about 69 to 206 mbar. It would have been obvious to one of ordinary skill in the art to set the air blowers of modified YOSHIZAWA to a blowing pressure below this range because it would avoid tempering the glass too early.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CYNTHIA SZEWCZYK whose telephone number is (571)270-5130. The examiner can normally be reached on Monday through Thursday 7:30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/  
Supervisory Patent Examiner, Art  
Unit 1791

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